

We claim:

1. An ink jet recording material comprising a support and at least one image recording layer, wherein on the upper side of the image recording layer there is deposited a protective layer containing an organic sulphur-containing compound which forms complexes with metal ions and a boric acid compound and wherein the image recording layer and/or the protective layer contains an organic compound having the formula MeX or MeX_2 where Me is a transition metal from group VIb, VIIb, VIIIb, Ib and IIb in the Periodic Table and X is an anion of a carboxylic acid having 4 to 12 carbon atoms.
2. The recording material according to claim 1, wherein the image receiving layer contains at least one dye-fixing layer and at least one ink absorbing layer.
3. The recording material according to claim 1 wherein the transition metal is selected from the group consisting of copper, cobalt, nickel, and manganese.
4. The recording material according to claim 1 wherein the anion is an anion of a hydroxycarboxylic acid.
5. The recording material according to claim 4 wherein the hydroxycarboxylic acid is selected from gluconic acid, glucaric acid, succinic acid, hydroxysuccinic acid (malic acid), 2,3-dihydroxysuccinic acid (tartaric acid) and their mixtures.
6. The recording material according to claim 4 wherein the hydroxycarboxylic acid is selected from the group of compounds containing an aromatic ring, especially hydroxybenzoic acids such as 2-hydroxybenzoic acid (salicylic acid), 3-hydroxybenzoic acid, 4-

hydroxybenzoic acid, 2,4,5-trihydroxybenzoic acid, 4- or 5-sulphosalicylic acid, 4- or 5-hydroxythiosalicylic acid.

7. The recording material according to claim 1 wherein the anion is selected from ethylene diamine tetracetic acid (EDTA), ethylene diamine triacetic acid, hydroxyethyl ethylene diamine tetracetic acid (HEEDTA), nitrolo triacetic acid or their salts.
8. The recording material according to claim 1 wherein the metal-compound-containing layer contains a hydroxybenzoic sulphonic acid as another component.
9. The recording material according to claim 1 wherein the complex-forming organic sulphur compound is a compound having the general formula $R_2C=S$, whereby R equally or independently of one another is hydrogen, an NH_2 group, an NHR^1 group, an NR^1_2 group, a methyl, ethyl, propyl, isopropyl group, a substituted or non-substituted aryl with 5 to 12 carbon atoms or alkoxy with 1 to 3 carbon atoms, or both groups R form an aromatic or non-aromatic ring with 5 or 6 carbon atoms which can contain nitrogen and/or sulphur as a heteroatom, wherein R^1 equally or independently of one another has the same meaning as R.
10. The recording material according to claim 1 wherein the complex-forming organic sulphur-containing compound is a compound having the general formula



wherein Y denotes the atoms required to form a substituted or non-substituted aromatic or non-aromatic ring.

11. The recording material according to claims 1 to 8, wherein the complex-forming organic sulphur-containing compound is a compound having the general formula R_2S , wherein R equally or independently of one another denotes hydrogen, alkyl with 1 to 6 carbon atoms, substituted or non-substituted aryl with 5 to 12 carbon atoms, alkoxy with 1 to 3 carbon atoms, an NH_2 group, an NHR^1 group, an NR^1_2 group, OR^1 , wherein R^1 has the same meaning as R.
12. The recording material according to claim 1 wherein the metal compound/sulphur-containing compound weight ratio is 1:1 to 1:2.